

CLAIMS

- A
1. A method for transforming a monocotyledon, comprising contacting a cultured tissue of said monocotyledon during dedifferentiation thereof obtained by culturing an explant on a dedifferentiation-inducing medium for ¹⁻⁶ ~~less than 7~~ days with a bacterium belonging to the genus *Agrobacterium* containing a super binary vector having the virulence region of Ti plasmid pTiBo542 contained in *Agrobacterium tumefaciens* A281, left and right border sequences of T-DNA of a Ti plasmid or an Ri plasmid of a bacterium belonging to the genus *Agrobacterium*, and a desired gene located between said left and right border sequences.
2. The method according to claim 1, wherein said virulent region in said super binary vector comprises *VirB* and *VirG* regions.
3. The method according to claim 1, wherein said explant is an immature tissue.
4. The method according to claim 3, wherein said immature tissue is an immature embryo.
5. The method according to any one of claims 1-4, wherein said monocotyledon is a plant belonging to the family Gramineae.
6. The method according to claim 5, wherein said monocotyledon is rice.
7. The method according to any one of claims 1-4, wherein said bacterium belonging to the genus

A

8. The method according to any one of claims 1-4, wherein said cultured tissue is transformed by contact with a suspension of said *Agrobacterium* having a cell population of 10^6 to 10^{11} cells/ml.
9. The method according to any one of claims 1-4, further comprising a step of selecting a transformed cell or a transformed tissue during dedifferentiation or in a dedifferentiated state, after subjecting said cultured tissue to transformation.
10. The method according to any one of claims 1-4, wherein said cultured tissue has the ability to regenerate a normal plant.
11. The method according to claim 8, wherein said cultured tissue is contacted with said suspension of *Agrobacterium* for 3-10 minutes, and then cultured on a solid medium for several days together with said *Agrobacterium*.
12. The method according to any one of claims 1-4, wherein said virulence region is originated from a super binary vector pTOK162.
13. A method for transforming a monocotyledon, comprising contacting a cultured tissue of said monocotyledon during dedifferentiation thereof obtained by culturing an explant derived from an immature tissue on a dedifferentiation-inducing medium for ~~less than 7~~¹⁻⁶ days with a bacterium belonging to the genus

14. The method according to claim 13, wherein said
5 immature tissue is an immature embryo.

16. The method according to claim 15, wherein said
10 monocotyledon is rice.

add B
add C